RAW SEQUENCE LISTING　DATE: 06/12/2000
PATENT APPLICATION: US/09/436,184　TIME: 16:07:18

Input Set : A:\PT.txt
Output Set: N:\CRF3\06122000\I436184.raw

ENTERED

```
   5 <110> APPLICANT: Wands, Jack R.
   7         de la Monte, Suzanne M.
   9         Ince, Nedim
  11         Carlson, Rolf I.
  15 <120> TITLE OF INVENTION: DIAGNOSIS AND TREATMENT OF MALIGNANT NEOPLASMS
  19 <130> FILE REFERENCE: R.I. Hosp. - Malignant Neoplasms
C--> 23 <140> CURRENT APPLICATION NUMBER: US/09/436,184
  25 <141> CURRENT FILING DATE: 1999-11-08
  29 <160> NUMBER OF SEQ ID NOS: 7
  33 <170> SOFTWARE: PatentIn Ver. 2.0
  37 <210> SEQ ID NO: 1
  39 <211> LENGTH: 36
  41 <212> TYPE: PRT
  43 <213> ORGANISM: Artificial Sequence
  47 <220> FEATURE:
  49 <223> OTHER INFORMATION: Description of Artificial Sequence: Consensus
  51         EGF-like domain
  55 <220> FEATURE:
  57 <223> OTHER INFORMATION: Wherein any Xaa may be any amino acid
  61 <400> SEQUENCE: 1
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  65  1               5                   10                  15
W--> 69 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Cys Xaa Xaa Xaa Xaa Xaa
  71              20                  25                  30
W--> 75 Xaa Xaa Xaa Cys
  77              35
  82 <210> SEQ ID NO: 2
  84 <211> LENGTH: 758
  86 <212> TYPE: PRT
  88 <213> ORGANISM: Homo sapiens
  92 <400> SEQUENCE: 2
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  96  1               5                   10                  15
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 102              20                  25                  30
 106 Arg Arg Glu Thr Lys His Gly Gly His Lys Asn Gly Arg Lys Gly Gly
 108              35                  40                  45
 112 Leu Ser Gly Thr Ser Phe Phe Thr Trp Phe Met Val Ile Ala Leu Leu
 114              50                  55                  60
 118 Gly Val Trp Thr Ser Val Ala Val Val Trp Phe Asp Leu Val Asp Tyr
 120  65              70                  75                  80
 124 Glu Glu Val Leu Gly Lys Leu Gly Ile Tyr Asp Ala Asp Gly Asp Gly
 126              85                  90                  95
 130 Asp Phe Asp Val Asp Asp Ala Lys Val Leu Leu Gly Leu Lys Glu Arg
 132              100                 105                 110
 136 Ser Thr Ser Glu Pro Ala Val Pro Pro Glu Glu Ala Glu Pro His Thr
 138              115                 120                 125
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PATENT APPLICATION: US/09/436,184   TIME: 16:07:18

Input Set : A:\PT.txt
Output Set: N:\CRF3\06122000\I436184.raw

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142 Glu Pro Glu Glu Gln Val Pro Val Glu Ala Glu Pro Gln Asn Ile Glu
144     130             135             140
148 Asp Glu Ala Lys Glu Gln Ile Gln Ser Leu Leu His Glu Met Val His
150 145             150             155             160
154 Ala Glu His Val Glu Gly Glu Asp Leu Gln Gln Glu Asp Gly Pro Thr
156             165             170             175
160 Gly Glu Pro Gln Gln Glu Asp Asp Glu Phe Leu Met Ala Thr Asp Val
162             180             185             190
166 Asp Asp Arg Phe Glu Thr Leu Glu Pro Glu Val Ser His Glu Glu Thr
168             195             200             205
172 Glu His Ser Tyr His Val Glu Glu Thr Val Ser Gln Asp Cys Asn Gln
174             210             215             220
178 Asp Met Glu Glu Met Met Ser Glu Gln Glu Asn Pro Asp Ser Ser Glu
180 225             230             235             240
184 Pro Val Val Glu Asp Glu Arg Leu His His Asp Thr Asp Asp Val Thr
186             245             250             255
190 Tyr Gln Val Tyr Glu Glu Gln Ala Val Tyr Glu Pro Leu Glu Asn Glu
192             260             265             270
196 Gly Ile Glu Ile Thr Glu Val Thr Ala Pro Pro Glu Asp Asn Pro Val
198             275             280             285
202 Glu Asp Ser Gln Val Ile Val Glu Glu Val Ser Ile Phe Pro Val Glu
204     290             295             300
208 Glu Gln Gln Glu Val Pro Pro Glu Thr Asn Arg Lys Thr Asp Asp Pro
210 305             310             315             320
214 Glu Gln Lys Ala Lys Val Lys Lys Lys Pro Lys Leu Leu Asn Lys
216             325             330             335
220 Phe Asp Lys Thr Ile Lys Ala Glu Leu Asp Ala Ala Glu Lys Leu Arg
222             340             345             350
226 Lys Arg Gly Lys Ile Glu Glu Ala Val Asn Ala Phe Lys Glu Leu Val
228             355             360             365
232 Arg Lys Tyr Pro Gln Ser Pro Arg Ala Arg Tyr Gly Lys Ala Gln Cys
234     370             375             380
238 Glu Asp Asp Leu Ala Glu Lys Arg Arg Ser Asn Glu Val Leu Arg Gly
240 385             390             395             400
244 Ala Ile Glu Thr Tyr Gln Glu Val Ala Ser Leu Pro Asp Val Pro Ala
246             405             410             415
250 Asp Leu Leu Lys Leu Ser Leu Lys Arg Arg Ser Asp Arg Gln Gln Phe
252             420             425             430
256 Leu Gly His Met Arg Gly Ser Leu Leu Thr Leu Gln Arg Leu Val Gln
258             435             440             445
262 Leu Phe Pro Asn Asp Thr Ser Leu Lys Asn Asp Leu Gly Val Gly Tyr
264     450             455             460
268 Leu Leu Ile Gly Asp Asn Asp Asn Ala Lys Lys Val Tyr Glu Glu Val
270 465             470             475             480
274 Leu Ser Val Thr Pro Asn Asp Gly Phe Ala Lys Val His Tyr Gly Phe
276             485             490             495
280 Ile Leu Lys Ala Gln Asn Lys Ile Ala Glu Ser Ile Pro Tyr Leu Lys
282             500             505             510
286 Glu Gly Ile Glu Ser Gly Asp Pro Gly Thr Asp Asp Gly Arg Phe Tyr
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RAW SEQUENCE LISTING   DATE: 06/12/2000
PATENT APPLICATION: US/09/436,184   TIME: 16:07:18

Input Set : A:\PT.txt
Output Set: N:\CRF3\06122000\I436184.raw

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288           515               520               525
292 Phe His Leu Gly Asp Ala Met Gln Arg Val Gly Asn Lys Glu Ala Tyr
294       530               535               540
298 Lys Trp Tyr Glu Leu Gly His Lys Arg Gly His Phe Ala Ser Val Trp
300 545               550               555               560
304 Gln Arg Ser Leu Tyr Asn Val Asn Gly Leu Lys Ala Gln Pro Trp Trp
306               565               570               575
310 Thr Pro Lys Glu Thr Gly Tyr Thr Glu Leu Val Lys Ser Leu Glu Arg
312           580               585               590
316 Asn Trp Lys Leu Ile Arg Asp Glu Gly Leu Ala Val Met Asp Lys Ala
318       595               600               605
322 Lys Gly Leu Phe Leu Pro Glu Asp Glu Asn Leu Arg Glu Lys Gly Asp
324       610               615               620
328 Trp Ser Gln Phe Thr Leu Trp Gln Gln Gly Arg Arg Asn Glu Asn Ala
330 625               630               635               640
334 Cys Lys Gly Ala Pro Lys Thr Cys Thr Leu Leu Glu Lys Phe Pro Glu
336               645               650               655
340 Thr Thr Gly Cys Arg Arg Gly Gln Ile Lys Tyr Ser Ile Met His Pro
342           660               665               670
346 Gly Thr His Val Trp Pro His Thr Gly Pro Thr Asn Cys Arg Leu Arg
348       675               680               685
352 Met His Leu Gly Leu Val Ile Pro Lys Glu Gly Cys Lys Ile Arg Cys
354       690               695               700
358 Ala Asn Glu Thr Arg Thr Trp Glu Glu Gly Lys Val Leu Ile Phe Asp
360 705               710               715               720
364 Asp Ser Phe Glu His Glu Val Trp Gln Asp Ala Ser Ser Phe Arg Leu
366               725               730               735
370 Ile Phe Ile Val Asp Val Trp His Pro Glu Leu Thr Pro Gln Gln Arg
372           740               745               750  .
376 Arg Ser Leu Pro Ala Ile
378           755
383 <210> SEQ ID NO: 3
385 <211> LENGTH: 2324
387 <212> TYPE: DNA
389 <213> ORGANISM: Homo sapiens
393 <400> SEQUENCE: 3
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397 gctccggcag cggtagcacg agtgcgggca gcagcagccc cggggcccgg agagagacaa 120
399 agcatggagg acacaagaat gggaggaaag gcggactctc gggaacttca ttcttcacgt 180
401 ggtttatggt gattgcattg ctgggcgtct ggacatctgt agctgtcgtt tggtttgatc 240
403 ttgttgacta tgaggaagtt ctaggaaaac taggaatcta tgatgctgat ggtgatggag 300
405 attttgatgt ggatgatgcc aaagtttat taggacttaa agagagatct acttcagagc 360
407 cagcagtccc gccagaagag gctgagccac acactgagcc cgaggagcag gttcctgtgg 420
409 aggcagaacc ccagaatatc gaagatgaag caaaagaaca aattcagtcc cttctccatg 480
411 aaatggtaca cgcagaacat gttgagggag aagacttgca acaagaagat ggacccacag 540
413 gagaaccaca acaagaggat gatgagtttc ttatggcgac tgatgtagat gatagatttg 600
415 agaccctgga acctgaagta tctcatgaag aaaccgagca tagttaccac gtggaagaga 660
417 cagtttcaca agactgtaat caggatatgg aagagatgat gtctgagcag gaaaatccag 720
419 attccagtga accagtagta gaagatgaaa gattgcacca tgatacagat gatgtaacat 780
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RAW SEQUENCE LISTING   DATE: 06/12/2000
PATENT APPLICATION: US/09/436,184   TIME: 16:07:18

Input Set : A:\PT.txt
Output Set: N:\CRF3\06122000\I436184.raw

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421 accaagtcta tgaggaacaa gcagtatatg aacctctaga aaatgaaggg atagaaatca 840
423 cagaagtaac tgctccccct gaggataatc ctgtagaaga ttcacaggta attgtagaag 900
425 aagtaagcat ttttcctgtg gaagaacagc aggaagtacc accagaaaca aatagaaaaa 960
427 cagatgatcc agaacaaaaa gcaaaagtta agaaaaagaa gcctaaactt ttaaataaat 1020
429 ttgataagac tattaaagct gaacttgatg ctgcagaaaa actccgtaaa aggggaaaaa 1080
431 ttgaggaagc agtgaatgca tttaaagaac tagtacgcaa ataccctcag agtccacgag 1140
433 caagatatgg gaaggcgcag tgtgaggatg atttggctga gaagaggaga agtaatgagg 1200
435 tgctacgtgg agccatcgag acctaccaag aggtggccag cctacctgat gtccctgcag 1260
437 acctgctgaa gctgagtttg aagcgtcgct cagacaggca acaatttcta ggtcatatga 1320
439 gaggttccct gcttaccctg cagagattag ttcaactatt tcccaatgat acttccttaa 1380
441 aaaatgacct tggcgtggga tacctcttga taggagataa tgacaatgca aagaaagttt 1440
443 atgaagaggt gctgagtgtg acacctaatg atggctttgc taaagtccat tatggcttca 1500
445 tcctgaaggc acagaacaaa attgctgaga gcatcccata tttaaaggaa ggaatagaat 1560
447 ccggagatcc tggcactgat gatgggagat tttatttcca cctgggggat gccatgcaga 1620
449 gggttgggaa caaagaggca tataagtggt atgagcttgg gcacaagaga ggacactttg 1680
451 catctgtctg gcaacgctca ctctacaatg tgaatgact gaaagcacag ccttggtgga 1740
453 ccccaaaaga aacgggctac acagagttag taaagtcttt agaaagaaac tggaagttaa 1800
455 tccgagatga aggccttgca gtgatggata aagccaaagg tctcttcctg cctgaggatg 1860
457 aaaacctgag ggaaaaaggg gactggagcc agttcacgct gtggcagcaa ggaagaagaa 1920
459 atgaaaatgc ctgcaaagga gctcctaaaa cctgtacctt actagaaaag ttccccgaga 1980
461 caacaggatg cagaagagga cagatcaaat attccatcat gcaccccggg actcacgtgt 2040
463 ggccgcacac agggcccaca aactgcaggc tccgaatgca cctgggcttg gtgattccca 2100
465 aggaaggctg caagattcga tgtgccaacg agaccaggac ctgggaggaa ggcaaggtgc 2160
467 tcatctttga tgactccttt gagcacgagg tatggcagga tgcctcatct ttccggctga 2220
469 tattcatcgt ggatgtgtgg catccggaac tgacaccaca gcagagacgc agccttccag 2280
471 caatttagca tgaattcatg caagcttggg aaactctgga gaga          2324
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474 <210> SEQ ID NO: 4
476 <211> LENGTH: 31
478 <212> TYPE: PRT
480 <213> ORGANISM: Artificial Sequence
484 <220> FEATURE:
486 <223> OTHER INFORMATION: Description of Artificial Sequence: EGF-like
488   cysteine-rich repeat
492 <220> FEATURE:
494 <223> OTHER INFORMATION: Wherein any Xaa may be any amino acid
498 <400> SEQUENCE: 4
500 Cys Asp Xaa Xaa Xaa Cys Xaa Xaa Lys Xaa Gly Asn Gly Xaa Cys Asp
502 1   5   10   15
506 Xaa Xaa Cys Asn Asn Ala Ala Cys Xaa Xaa Asp Gly Xaa Asp Cys
508   20   25   30
513 <210> SEQ ID NO: 5
515 <211> LENGTH: 1242
517 <212> TYPE: PRT
519 <213> ORGANISM: Homo sapiens
523 <400> SEQUENCE: 5
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531 Gly Tyr Leu Arg Lys Pro Lys Ser Met His Lys Arg Phe Phe Val Leu
533   20   25   30

```
537 Arg Ala Ala Ser Glu Ala Gly Gly Pro Ala Arg Leu Glu Tyr Tyr Glu
539          35                  40                  45
543 Asn Glu Lys Lys Trp Arg His Lys Ser Ser Ala Pro Lys Arg Ser Ile
545      50              55              60
549 Pro Leu Glu Ser Cys Phe Asn Ile Asn Lys Arg Ala Asp Ser Lys Asn
551 65                  70                  75                  80
555 Lys His Leu Val Ala Leu Tyr Thr Arg Asp Glu His Phe Ala Ile Ala
557              85                  90              95
561 Ala Asp Ser Glu Ala Glu Gln Asp Ser Trp Tyr Gln Ala Leu Leu Gln
563          100                 105                 110
567 Leu His Asn Arg Ala Lys Gly His His Asp Gly Ala Ala Ala Leu Gly
569          115                 120                 125
573 Ala Gly Gly Gly Gly Gly Ser Cys Ser Gly Ser Ser Gly Leu Gly Glu
575      130             135             140
579 Ala Gly Glu Asp Leu Ser Tyr Gly Asp Val Pro Pro Gly Pro Ala Phe
581 145                 150                 155                 160
585 Lys Glu Val Trp Gln Val Ile Leu Lys Pro Lys Gly Leu Gly Gln Thr
587              165             170             175
591 Lys Asn Leu Ile Gly Ile Tyr Arg Leu Cys Leu Thr Ser Lys Thr Ile
593              180             185             190
597 Ser Phe Val Lys Leu Asn Ser Glu Ala Ala Ala Val Val Leu Gln Leu
599          195             200             205
603 Met Asn Ile Arg Arg Cys Gly His Ser Glu Asn Phe Phe Phe Ile Glu
605      210             215             220
609 Val Gly Arg Ser Ala Val Thr Gly Pro Gly Glu Phe Trp Met Gln Val
611 225             230             235             240
615 Asp Asp Ser Val Val Ala Gln Asn Met His Glu Thr Ile Leu Glu Ala
617              245             250             255
621 Met Arg Ala Met Ser Asp Glu Phe Arg Pro Arg Ser Lys Ser Gln Ser
623          260             265             270
627 Ser Ser Asn Cys Ser Asn Pro Ile Ser Val Pro Leu Arg Arg His His
629          275             280             285
633 Leu Asn Asn Pro Pro Pro Ser Gln Val Gly Leu Thr Arg Arg Ser Arg
635      290             295             300
639 Thr Glu Ser Ile Thr Ala Thr Ser Pro Ala Ser Met Val Gly Gly Lys
641 305             310             315             320
645 Pro Gly Ser Phe Arg Val Arg Ala Ser Ser Asp Gly Glu Gly Thr Met
647          325             330             335
651 Ser Arg Pro Ala Ser Val Asp Gly Ser Pro Val Ser Pro Ser Thr Asn
653          340             345             350
657 Arg Thr His Ala His Arg His Arg Gly Ser Ala Arg Leu His Pro Pro
659          355             360             365
663 Leu Asn His Ser Arg Ser Ile Pro Met Pro Ala Ser Arg Cys Ser Pro
665      370             375             380
669 Ser Ala Thr Ser Pro Val Ser Leu Ser Ser Ser Ser Thr Ser Gly His
671 385             390             395             400
675 Gly Ser Thr Ser Asp Cys Leu Phe Pro Arg Arg Ser Ser Ala Ser Val
677              405             410             415
681 Ser Gly Ser Pro Ser Asp Gly Gly Phe Ile Ser Ser Asp Glu Tyr Gly
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VERIFICATION SUMMARY   DATE: 06/12/2000
PATENT APPLICATION: US/09/436,184   TIME: 16:07:19

Input Set : A:\PT.txt
Output Set: N:\CRF3\06122000\I436184.raw

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L:23  M:270 C: Current Application Number differs, Replaced Current Application Number
L:63  M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:1
L:63  M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:1
L:63  M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:1
L:69  M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:1
L:69  M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:1
M:340 Repeated in SeqNo=1
L:75  M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:1
L:75  M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:1
L:500 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:4
L:500 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:4
L:500 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:4
L:506 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:4
L:506 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:4
M:340 Repeated in SeqNo=4
```